Offshore Special Regulation 3.29 – Communications Equipment, EPFS (Electronic Position-Fixing System), Radar, AIS

Radar - Broadband™ (Frequency Modulated Continuous Wave)

A submission from the Chairman, Special Regulations Sub-Committee (on behalf of Stuart Carruthers, Chairman International Regulations Commission)

Purpose or Objective

To amend 3.29.1(L) to permit Broadband Radar in Category 0.

Proposal

3.29.1 The following shall be provided:

(A) . . . (K) unchanged

“(L) An active radar set permanently installed either:

- A pulse (magnetron) unit with not less than 4kW PEP and an antenna unit with a maximum dimension not less than 533mm.

Or

- A frequency modulated continuous wave (FMCW) Broadband Radar™ unit

The radar antenna unit shall remain essentially horizontal when the yacht is heeled and at least 7 meters above the water. Installations in place before January 2006 shall comply as closely as possible with OSR 3.29(L). “

Current Position

“ (L) An active radar set permanently installed, with not less than 4kW PEP with antenna mounted at least 7 meters above the water. The radar antenna unit shall have a maximum dimension not less than 533mm. The radar shall be mounted so that the antenna unit remains essentially horizontal when the yacht is heeled. Installations in place before January 2006 shall comply as closely as possible with OSR 3.29(L). “

Reason

1. Stuart Carruthers: “I think that OSR do need an amendment to allow the carriage of Broadband Radar, they are out there, relatively cheap and have a number of significant advantages including better definition and reduced power usage. In the case of FMCW scanner size is not a relevant factor as the technologies are significantly different. “

2. IMOCA Class: “The Broadband radar has been tried on several IMOCA races since last Route du Rhum and Barcelona World race, skippers say it is very efficient. The consumption of electricity is much lower than the pulse radar. “